

Request for Information
For the
Marine Corps Tactical Welding Shop (MCTWS)
M67854-11-I-5096

1. **Background.** The Marine Corps Systems Command (MARCORSSYSCOM), Program Manager, Engineering Systems (PMES) Program Office is conducting market research to obtain information from commercial sources capable of providing a modified commercial, Non-Developmental Item (NDI) tactical welding shop as a replacement for the current MCTWS, TAMCN B2685, to address its current approved acquisition objective of 290 units.

The MCTWS provides the Marine Corps with the capability to perform ferrous and nonferrous maintenance welding and fabrication. The MCTWS is currently used by organizational and field maintenance units in both garrison and field environments. The currently fielded MCTWS is mounted on the M103-A3 trailer chassis. The Program Office is seeking responses from vendors interested in integrating a comparable welding shop on the M103-A3 trailer chassis. No Government Furnished Equipment will be provided. The weld shop enclosure will be required to stay within the dimensional constraints of the current enclosure.

2. **System Characteristics.** The complete MCTWS system will consist of the welder, Metal Inert Gas (MIG) welding unit, Tungsten Inert Gas (TIG) welding unit, wire feeder unit, oxyacetylene unit, and required welding accessories and storage cabinets.

3. **Dimensional and Transportability Requirements.** The combined weight of the system shall not exceed 7,000 pounds (3,175 kg). The MCTWS and components shall be rugged and capable of withstanding the shock and vibration associated with the transit over improved surfaces and unimproved terrain. Tie-down and lifting attachments shall be provided and marked in accordance with MIL-STD 209_. The MCTWS is currently towed by the Medium Tactical Vehicle Replacement (MTVR). The vendor will be required to incorporate an adjustable pintle hook into the system to improve the interface between the MCTWS and the MTVR.

4. **Performance Requirements.**

▪ **ARC Welding Machine.**

- a) The engine shall be four hundred ampere, liquid-cooled generator that operates on diesel (or JP8).
- b) The welding machine will provide 300 amperes at 40 volts DC on a 100% duty cycle.
- c) The machine will have a 115 volt, 3KVA, AC auxiliary electric power supply for lights and power tools.
- d) The welding machine will be capable of operating while oriented in any direction on a 15 percent slope.
- e) The welding machine will have remote current controls.
- f) A positive acting switch is required to change the polarity of the welding current.
- g) The welder will be protected by a weather-proof housing.

▪ **Metal Inert Gas (MIG) Welding Unit.**

- a) A small, lightweight gun is required to facilitate access to restricted space.

- b) A wire feeder will be separate from the gun.
 - c) The welding head will use appropriate inert gas as a shield during welding.
- **Wire Feeder Unit.**
 - a) A wire feeder unit will be required for both soft wire MIG and hard wire inter-shield welding. It is desired that the same wire feeding unit be used for both functions but not at the expense of undue complexity or difficulty in conversion.
 - b) The wire feeder unit, when used in combination with various accessory equipment, will automatically feed the welding wire to the weld zone at controlled rates and possess the ability to automatically adjust the burn rate as the distance of the gun from the weld zone changes.
 - c) The wire feeder will have provisions for mounting commercially available wire reels of 10-25 pounds (4.5-11.34 kg).
 - d) The wire feeder will be capable of feeding small diameter aluminum (.03-.078 inch (.076-.198 cm)) when used with the MIG process.
 - e) The same or an additional wire feeder will be capable of feeding 1/16-1/8 inch (.1588-.338 cm) flux cored wire.
 - f) The gun used when feeding flux cored wire will be equipped with a 360 degree positionable quick-disconnect gun tube.
- **Tungsten Inert Gas Welding (TIG) Unit.**
 - a) The TIG welding system will be compact, rugged, easily transportable and compatible with the welding machine.
 - b) It will be water cooled and provided with a self contained water circulation unit.
- **Welding Cables.**
 - a) Cables used in electrode welding will be used with other accessory equipment.
 - b) Cables will use quick-disconnect fitting.
 - c) Each welding machine will be equipped with one 25 foot (7.62 m) and two 50 foot (15.24 m) cables.
- **Gas Tanks.** The MCTWS system shall have provisions for mounting gas cylinders to include, but not limited to, oxygen, argon and acetylene.
- **Armor Welding Kit.** This capability will be incorporated into the MCTWS. This enhanced capability includes the preferred method of Gas Metal Arc Welding Constant-Voltage (GMAW CV) and the secondary method of Shielded Metal Arc Welding (SMAW). It is desired that the replacement MCTWS include an armor repair capability without adding an optional and separate kit. The components of the current armor welding kit are listed below.

| TMWSS PART # | MANUFACTURER PART # | VENDOR / MFG. | NSN | U/I | QTY | DESCRIPTION |
|-----------------|------------------------|----------------|------------------|-----|-----|-----------------------------------|
| 750 | PMI-MCTWS750 | PMI | 3431-01-505-0248 | EA | 1 | Armor Kit |
| 751 | 120CF | Taylor-Wharton | 8120-01-508-7315 | EA | 1 | CO ₂ Gas Cylinder |
| 752 | GMA-MX-580A-75-320-25 | HSA | 3431-01-508-7318 | EA | 1 | Mixer |
| 753 | PMI-MCTWS753 | PMI | | EA | 1 | Mounting Bracket, CO ₂ |
| 754 | 3000775 | Smith/HSA | 6740-01-508-7324 | EA | 1 | Regulator, CO ₂ |
| 755 | THY-E70S6.035 | Hughes | 6685-01-508-7335 | SP | 1 | Regulator, Argon |
| 756 | PMI-MCTWS756 | Smith/HSA | 5935-01-508-7337 | EA | 2 | Gas Hose Connectors, 6ft |

- **Reliability, Availability, and Maintainability (RAM).** The basic welding machine, along with the components and accessories, is considered to be a commercial non-developmental item. Since industry does not specify quantitative RAM values for this type of equipment, the RAM requirements characteristics will be consistent with commercial performance that has been proven acceptable through use by commercial operators. Specifically, these items shall be of a make and model which have been in commercial use in meaningful numbers for at least one year, satisfactorily performing user-determined tasks similar to those proposed for the military application.
- **Health and Safety requirements.** The replacement welding system shall conform to all current Occupational Safety and Health Administration (OSHA) and Environmental Protective Agency (EPA) requirements.

5. **Delivery Schedule.** Provide an estimate for how long it will take to produce and deliver 5 test assets from the date of contract award. Provide an additional estimate for how long it will take to deliver all 290 units. Break the schedule down into units per week starting at contract award through all 290 units. This estimate will provide the PMES Program Office information for planning purposes.

6. **Rough Order of Magnitude.** The vendor shall provide a Rough Order of Magnitude for the proposed MCTWS replacement in terms of unit cost for the system, technical publications, and training materials. These figures are intended for planning purposes only and are considered non-binding.

7. **Business Type & Size.** The vendor shall provide business type and size when responding to this Request for Information.

8. **Additional Documentation/Requirements.** The following information is intended to provide insight into the information required to support the replacement MCTWS. This information is sample verbiage for items that would likely be requested in a formal Statement of Work. This information is meant to inform potential vendors regarding supportability requirements and potential deliverables. Although questions and feedback are welcome, no response is required for the following items:

- **Unique Identification (UID).** The contractor shall implement specific Item Unique Identification (IUID) markings, as defined in MIL-STD-130 and DFARS clause 252.211-7003. The IUID marking shall be incorporated into existing data plates when possible. Bar Coding and the two-dimensional IUID data matrix shall be machine-readable with common optical scanning devices and be accompanied by the corresponding human readable markings when practical.
- **Logistics Support.** The contractor shall propose, establish, and maintain a logistics support program that ensures support for the MCTWS to comply with operational requirements and mission scenarios. The contractor shall describe their approach to logistics support for the MCTWS throughout the service life of the MCTWS beyond receipt of final delivery quantities.

- **Provisioning Plan.** The contractor shall establish, manage, and execute a Logistics Management Information (LMI) program in accordance with MIL-PRF-49506. MIL-HDBK-502 may be used for additional guidance. The LMI program shall be the basis for the integration of the logistics support element, and provide the systems engineering interface between the engineering and integrated logistics efforts.
- **Provisioning Technical Documentation.** The contractor shall develop and document Provisioning Technical Documentation to include, but not be limited to a Provisioning Parts List (PPL), Long Lead Time Items List (LLTIL), Tools and Test Equipment List (TTEL), Common and Bulk Items List (CBIL), and any Design Change Notices (DCN).
- **Supplemental Data For Provisioning (SDFP).** SDFP is also referred to as Engineering Data For Provisioning. SDFP is technical data used to fully describe parts and equipment for cataloging purposes. SDFP includes technical data which provides definitive identification of dimensional, material, mechanical, electrical, or other characteristics adequate for provisioning of the support items of the end article(s) on contract.

SDFP consists of data needed to indicate the physical characteristics, location, and function of the item, such as:

- Technical information of items for maintenance support considerations
- Item identification/descriptions necessary for cataloging actions and assignment of a National Stock Number
- Review for item entry control
- Standardization to include standardization/interchangeability
- Item management coding
- Identification/procurement of initial spares
- Preparation of allowance/issue lists
- Identifying source, maintenance and recoverability coding

The contractor shall furnish SDFP in the following order of precedence:

- Government or industry recognized specifications or standards
- Engineering drawings
- Commercial catalogs or catalog descriptions

As a minimum, any data necessary to identify dimensional, material, mechanical, electrical, or other characteristics necessary to describe "form, fit and function" shall be provided.

- **Technical Manuals.** The contractor shall prepare technical manuals to include: Lubrication Orders (LO), Operators and Maintenance Manuals IAW MIL-STD-40051-2 with Change 3, MIL-HDBK-1222-C and MIL-PRF-63004D (TM) for the MCTWS.
- **Training Products and Services.** The contractor shall provide a training program in accordance with MIL-PRF-29612 and the USMC Systems Approach

to Training Manual. Prior to course initiation, the contractor shall meet safety standards, which are in accordance with local, state, and federal regulations. Consideration needs to be given for training at different levels for the Operator and Maintainer (Operator/Crew, Field, and Sustainment levels) and in the following areas: Instructor and Key Personnel (I&KP) Training and New Equipment Training (NET).

Commercial sources possessing the capability to accomplish this requirement are invited to submit a statement of qualification, enclose product literature, past performance information, current General Services Administration or other schedule information (if applicable), and price schedules or catalogues. **Request for Information responses shall be received by Ground Transportation and Engineering Systems (GTES), no later than 15 July 2011.** Product information shall be submitted to Executive Director, Marine Corps Systems Command, and ATTN: Mr. Tom Anable, GTES, 2200 Lester St., Quantico, VA. 22134-5010 or electronically at Thomas.anable@usmc.mil. Telephone responses will not be honored.

Submissions are for market research and all materials will be retained in confidence. Any vendor proprietary information must be marked as such on a page-by-page basis.

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